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AUTHOR	Karlen, Janice M.
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ABSTRACT

While institutions of higher education are often at the forefront in technology conception and design, they often lag behind in its utilization. Inequities in availability of sophisticated technology at higher education institutions raise the question of whether the "haves" are doing a better job of educating students than the "have nots." The employers for whom graduates will work, in most cases, will not have the most current technological tools, because most new jobs are created in small businesses. It is more important to have an educational program that allows students to obtain transferable knowledge to corporately-specific systems and be either upgradeable or downgradeable to the level of technical support available at future places of employment. A means should be available for determining when a development of considerable significance has occurred that renders existing methods obsolete. Faculty members need to become literate in computer skills and their application, and institutions need to provide convenient access to equipment and training and to nurture contacts between faculty and the practitioners in their fields to develop communication and learning pathways. The appropriateness of making learning fun through technological "edutainment" is questioned, as this may create students who later become employees resistant to working when the work is not fun. (JDD)

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Technology and Higher Education: In Debt, Inept, and in Loco Parentis

Dr. Janice M. Karlen

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Technology and Higher Education:
In Debt, Inept, and in Loco Parentis

Dr. Janice M. Karlen

The current availability and sophistication of technology are unparalleled. While institutions of higher education are often at the forefront in the conception and design of technology, more often, they lag behind in its utilization. This paper will address three aspects of this delay: insufficient funds, lack of instructor preparation, and an increasing need for personalized student support services in many institutions.

When faculty members and administrators read publications such as The Chronicle of Higher Education, and attend conferences of their peers, it becomes evident that some institutions are "haves," while others are "have nots". At many institutions, colleagues may communicate via voice or electronic mail, utilize sophisticated laboratories and equipment at will, and manage their classes, facilities, and time electronically from their offices or homes without thought. At their unfortunate sister institutions, while computer laboratories exist, there is no network availability, faculty share a central "faculty lab" where stand-alone PC's dominate, and electronic communication is a fantasy that can only be enjoyed vicariously.

One of the questions raised from this inequity regards the impact on education. Are the "haves" doing a better job of educating students than the "have nots"? Most of the available literature would lead you to believe that this is true. However, if you look at the reality of the workplace, the answer is not quite so clear.

While some in higher education argue that it is necessary for institutions to maintain the latest and the most powerful hardware and software, it must be recognized that the employers for whom our graduates will work, in most cases, will not have the most current technological tools. It is an established fact that most new jobs will be created in the area of small business. Will these organizations be prepared with the newest releases, latest software and hardware and the skill to use them? I think not. Therefore, from an educational perspective, for most students, and the institutions which educate them, it is not necessary to have available the most modern, but rather to have an educational program in place that allows students to obtain transferable knowledge to

corporately-specific systems, and be either upgradeable or downgradeable to the level of technical support available at employers.

Clearly, it will be difficult for faculty members from some disciplines to accept this viewpoint, as they crave access to improved systems for themselves and their students. However, it is not feasible for the educational institution to be expending resources continuously on support tools that may or may not be available to graduates in employment, when the employers themselves may not be doing so. Instead, the more prudent course of action would be to develop a means, either through regular program assessment, curricular advisory committees, or association with professional societies, for determining when a development of considerable significance has occurred as to render existing methods obsolete.

It is difficult to believe, yet true, that many faculty members at institutions of higher education still do not have access to computers and accessory equipment, or knowledge of their use. Further, some of these individuals lack an understanding of the reasons that they should extend themselves to learn computer skills. Part of this problem may be attributable to the relative isolation in which faculty find themselves. For example, it is easy to find professors in departments of business administration who have not been in a corporate environment, even for a day, in the past twenty years. How can we hope to have the participation of these individuals in technological advances when they have no concept of their application? How can they be expected to prepare adequately their students? Very simply, they cannot. What becomes even more surprising, however, is that the textbooks that are supporting the educational process are often written by individuals who are themselves unaware, or find a discussion of the computerization of certain activities dispensable. This is the truly alarming aspect of this problem.

When a faculty member does attempt to become literate in computer skills and their application, very often a startling realization occurs -- technology has so far surpassed their level of understanding that the task of becoming current takes on monumental proportions. Many institutions no longer offer basic, in service instruction in topics such as DOS, word processing, or spread sheets. The training programs have progressed to integrated graphics and CD-roms, and the trainers are often unsympathetic to unsophisticated users. An example of how poorly coordinated and planned is one institution's program for increasing computer literacy by faculty members involving the distribution of a few computers to each department. In the case of one department this

meant four computers for fourteen full-time and over twenty adjunct instructors. Printers or access to printers were not provided. Training was not available. Ultimately, the fortunate few faculty members to receive the computers for their offices were those who also had computers at home, knew how to use them, or had some other means, usually at home to print out information. In this case, no one was well-served. In contrast with this is the example of Bakersfield College, where they have in place a program to involve faculty in using multimedia for instruction. According to Linda Belcher McElwrath, Director of information Systems, they have found that there are three keys to success: formalized training classes that are repeated semester after semester, committing support staff to respond spontaneously to calls for assistance, and a multimedia lab where faculty can go to work in privacy from students.

If an institution truly wants the faculty to be computer literate, not only for instructional purposes, but also in their area of expertise, it needs to show faculty why computer knowledge is essential, provide appropriate, convenient access to equipment and training, and nurture contacts between faculty and the practitioners in their fields to develop communication and learning pathways. Unfortunately, very few institutions do this or do it well.

Proponents of the use of technology in higher education often tout it as the solution to students' problems ranging from an inability to attend classes to boredom to a lack of concentration. They cite such opportunities as distance learning via satellite hook-up, interactive classrooms, and on-line courses as the educational modes of the future. In the February 28, 1994 issue of Business Week, the featured special report bore the title, "The Learning Revolution," in which was extolled the virtues of edutainment for preschoolers through college students.

While the use of technology may be the answer for some individuals, for others, it provides no solution and may, in fact be a barrier. For example, an adult learner, whose personal and employment responsibilities preclude regular class attendance, may benefit from the freedom that videotapes and on-line instruction offer. Conversely, the 18-year-old, living in a drug-infested environment may be totally unable to cope with self-paced, individualized instruction outside of the formal academic community, let alone have the funds to purchase the necessary equipment. For such a student, who may have family and employment and commitments, in addition to full-time education, the requirement that a

project be completed using a computer either at home or at school may render the assignment impossibly burdensome.

To other students, the faculty member takes a role greater than that of educator. To them, the faculty member may become a stable, reliable source of information and advice in an otherwise confusing world. Faculty members have dealt with such diverse problems as homelessness, unwanted pregnancy, unemployment insurance, automobile accidents, sexual harassment in the workplace and arrests. This is in addition to the traditional elements of academic and career counseling, preparation for employment, and interviewing. Regardless of how sophisticated or well-programmed, no technology is prepared to deal with these types of human problems on a personal basis.

Finally, this writer must question the existence of the term "edutainment" and its appropriateness in the longer term. Edutainment is the result of development of activities that are at the same time educational and entertaining, usually through the use of technology. More simply, it is making learning fun. While it is helpful to have educational pursuits fascinating and stimulating, the necessity of making them fun is elusive. From the perspective of one who has been in the workforce for nearly twenty years, it is rare to have achieved a set number of points, killed a space alien, or beat someone's best time by the end of the workday. Further, many days are boring. There is work to be done that is repetitive and cumbersome, and the external rewards are sparingly given. As the learning environment is adjusted to individualize instruction, allow students to progress at their own pace and adjust parameters to suit their own ability, how will these future workers be trained to be persistent, determined, and work when it is not fun? Where is self-discipline learned when the rules of the game can be changed so the student always "wins"? The easy solution, edutainment, may be the quick fix to educational problems, but may create substantial workforce problems in the future.

In a recent study, "How Business Students Learn Things," Langdana, Rotonda, and Ryan, aimed at finding out how people learned remembered things. The result of their study showed that the lectures, the professor, the text and the homework, were the primary elements which students attributed their learning to. Computer exercises were ranked fifteenth and audio-visual aids nineteenth. The results were exactly the same whether the respondents had A+ or C- averages. While the study is continuing, these findings are noteworthy.

Technology should be viewed as a tool in education and a tool in the workplace which students will enter. As such, it needs to be viewed in the same manner as any other piece of equipment which an institution would consider for purchase. Simply, its benefit must exceed its cost. If it is expected that faculty members be competent in the use of the tool, then it is incumbent upon the institution to provide an adequate supply, appropriate training, and support. If not, there is no need to make an investment in computer literacy any more than an institution would teach the entire faculty to ski. Finally, it should be recognized that institutions of higher education have a greater obligation to their students than to teach them the material that may be found in books or transmitted electronically. It is for us to teach the skills of life, its protection and enhancement. While this may be found also in books, it is better communicated through the personal interaction that occurs within the protected community that is academia.

References

Armstrong, L., Yang, D.J., and Cuneo, A. (1994, February 28). The Learning Revolution. Business Week, pp. 80-88.

Langdana, F., Rotonda, P., and Ryan, J. (1994). How Business Student Learn Things. New Jersey: Rutgers University, Management Research from Rutgers.

Mc Elwrath, L.B. (1993). Shop Class for Academia. Technological Horizons in Education Journal, 21(5), 41-43.